

NEC3 Professional Services Contract (PSC3)

Contract between **NTCSA SOC Ltd**
(Reg No. 2021/539129/30)

and [Insert at award stage]
(Reg No. _____)

for [•]

Contents:	No of pages
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CONTRACT No. [Insert at award stage]

PART C1: AGREEMENTS & CONTRACT DATA

Document reference	Title	No of pages
C1.1	Form of Offer & Acceptance [to be inserted from Returnable Documents at award stage]	[•]
C1.2a	Contract Data provided by the <i>Employer</i>	[•]
C1.2b	Contract Data provided by the <i>Consultant</i> [to be inserted from Returnable Documents at award stage]	[•]
C1.3	Securities proforma	[•]

C1.1 Form of Offer & Acceptance

Offer

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of:

The Provision of Professional Engineering Services to Transmission Division on an as and when required basis for a period of five (5) years.

The tenderer, identified in the Offer signature block, has

<i>either</i>	examined the documents listed in the Tender Data and addenda thereto as listed in the Returnable Schedules, and by submitting this Offer has accepted the Conditions of Tender.
<i>or</i>	examined the draft contract as listed in the Acceptance section and agreed to provide this Offer.

By the representative of the tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance the tenderer offers to perform all of the obligations and liabilities of the *Consultant* under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the *conditions of contract* identified in the Contract Data.

The offered total of the Prices exclusive of VAT is	R
Value Added Tax @ 15% is	R
The offered total of the Prices inclusive of VAT is	R
(in words)	

If Option E or G apply, for each offered total insert in brackets, "(Not Applicable – Cost reimbursable)"

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the *Consultant* in the *conditions of contract* identified in the Contract Data.

Signature(s)

Name(s)

Capacity

**For the
tenderer:**

(Insert name and address of organisation)

Name &
signature of
witness

Date

Acceptance

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the tenderer's Offer. In consideration thereof, the Employer shall pay the Consultant the amount due in accordance with the *conditions of contract* identified in the Contract Data. Acceptance of the tenderer's Offer shall form an agreement between the Employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1	Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
Part C2	Pricing Data
Part C3	Scope of Work: The Scope

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The tenderer shall within two weeks of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the *conditions of contract* identified in the Contract Data at, or just after, the date this agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed and signed original copy of this document, including the Schedule of Deviations (if any).

Signature(s)

Name(s)

Capacity

**for the
Employer**

(Insert name and address of organisation)

Name &
signature of
witness

Date

Note: If a tenderer wishes to submit alternative tenders, use another copy of this Form of Offer and Acceptance.

Schedule of Deviations

Note:

1. To be completed by the Employer prior to award of contract. This part of the Offer & Acceptance would not be required if the contract has been developed by negotiation between the Parties and is not the result of a process of competitive tendering.
2. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
3. A tenderer's covering letter must not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid be the subject of agreement reached during the process of Offer and Acceptance, the outcome of such agreement shall be recorded here and the final draft of the contract documents shall be revised to incorporate the effect of it.

No.	Subject	Details
1		
2		
3		
4		
5		
6		
7		

By the duly authorised representatives signing this Schedule of Deviations below, the Employer and the tenderer agree to and accept this Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules, as well as any confirmation, clarification or changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Form shall have any meaning or effect in the contract between the parties arising from this Agreement.

For the tenderer:

For the Employer

Signature

Name

Capacity

On behalf
of

(Insert name and address of organisation)

(Insert name and address of organisation)

Name &
signature
of witness

Date

C1.2 PSC3 Contract Data

Part one - Data provided by the *Employer*

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option	
	dispute resolution Option	G: Term contract
	and secondary Options	W1: Dispute resolution procedure
		X1: Price adjustment for inflation
		X2 Changes in the law
		X7: Delay damages
		X8: Collateral warranty agreements
		X9: Transfer of rights
		X10 <i>Employer's Agent</i>
		X11: Termination by the <i>Employer</i>
		X18: Limitation of liability
		Z: <i>Additional conditions of contract</i>
	of the NEC3 Professional Services Contract (April 2013) ¹	
10.1	The <i>Employer</i> is (Name):	NTCSA SOC Ltd (reg no: 2021/539129/30), a state-owned company incorporated in terms of the company laws of the Republic of South Africa
	Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
	Tel No.	[•]
	Fax No.	[•]
11.2(9)	The <i>services</i> are	Provision of Professional Engineering to NTCSATransmission Company South Africa
11.2(10)	The following matters will be included in the Risk Register	High level risks associated with this contract: • Scope changes • Excessive travelling • Unplanned Outages

¹ Available from Engineering Contract Strategies Tel 011 803 3008 Fax 011 803 3009 and www.ecs.co.za

11.2(11)	The Scope is in	Part 3 (C3): Scope of Work and all documents to which it refers.	
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa	
13.1	The <i>language of this contract</i> is	English	
13.3	The <i>period for reply</i> is	2 weeks	
13.6	The <i>period for retention</i> is	5 years following Completion or earlier termination.	

2 The Parties' main responsibilities

25.2	The <i>Employer</i> provides access to the following persons, places and things	access to	access date
		1	TBC

3 Time

31.2	The <i>starting date</i> is.	TBC	
11.2(3)	The <i>completion date</i> for the whole of the services is.	Sixty (60) Months from the <i>starting date</i>	
11.2(6)	The <i>key dates</i> and the <i>conditions</i> to be met are:	Condition to be met	key date
		1	As per task order
			As per task order
31.1	The <i>Consultant</i> is to submit a first programme for acceptance within	As per the task order	
32.2	The <i>Consultant</i> submits revised programmes at intervals no longer than	As per the task order	

4 Quality

40.2	The quality policy statement and quality plan are provided within	Submission at Tender Stage	
42.2	The <i>defects date</i> is	As per the Task Order	

5 Payment

50.1	The <i>assessment interval</i> is	the 25th day of each successive month.	
50.3	The <i>expenses</i> stated by the <i>Employer</i> are	Item	Amount
		[•]	[•]
		[•]	[•]
		[•]	[•]

		[•]	[•]
51.1	The period within which payments are made is	T.B.A.	
51.2	The <i>currency of this contract</i> is the	South African Rand	
51.5	The <i>interest rate</i> is	the publicly quoted prime rate of interest charged by [•] Standard Bank of South Africa Limited at the time an amount payable in SA Rand was due, and the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption "Money Rates" in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted <i>mutatis mutandis</i> every 6 months thereafter and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove	
6	Compensation events	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.	
7	Rights to material	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.	
8	Indemnity, insurance and liability	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.	
82.1	The <i>Consultant's</i> total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than the excluded matters, is limited to	The total of the Prices	
9	Termination	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.	
10	Data for main Option clause		

G	Term contract	
21.4	The <i>Consultant</i> prepares forecasts of the total Time Charge and <i>expenses</i> at intervals no longer than	2 weeks after receipt of the signed Task Order Request.
50.4	The <i>exchange rates</i> are those published in	[•] on [•] (date).
11	Data for Option W1 (Dispute Resolution)	
W1.1	The <i>Adjudicator</i> is	the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).
	Address	[•]
	Tel No.	[•]
	Fax No.	[•]
	e-mail	[•]
W1.2(3)	The <i>adjudicator nominating body</i> is:	the Chairman of the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering. (See www.ice-sa.org.za).
W1.4(2)	The <i>tribunal</i> is:	arbitration
W1.4(5)	The <i>arbitration procedure</i> is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	[•] South Africa
	The person or organisation who will choose an arbitrator	
	- if the Parties cannot agree a choice or - if the <i>arbitration procedure</i> does not state who selects an arbitrator, is	the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.
12	Data for secondary Option clauses	
X1	Price adjustment for inflation	Task Orders that are greater than twelve (12) months
X1.1	The index is	The prices will be fixed and firm for the first 12 months, and then it will be subjected to CPA, with 15% fixed portion and 85% adjusted using SEIFSA Index, Table D3 (CPI).

The staff rates are
{state whether "Fixed at the Contract Date
and are not variable with changes in salary
paid to individuals" }

X2	Changes in the law	
X2.1	The law of the project is	The law of the Republic of South Africa
X7	Delay damages	
X7.1	Delay damages for late Completion of the whole of the <i>services</i> are	Maximim of 10% . to be specified on the Task Order.
X10	The <i>Employer's Agent</i>	
X10.1	The <i>Employer's Agent</i> is	
	Name:	Thobile Nzimande
	Address	Eskom Holdings State Owned Company Limited Megawatt Park, Maxwell Drive, Sandton, Johannesburg
	The authority of the <i>Employer's Agent</i> is	To carry out all the Employer's actions in this contact
X11	Termination by the <i>Employer</i>	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
Z	The <i>Additional conditions of contract</i> are	
	Z1 to Z16 will always apply.	

Z1 Cession delegation and assignment

- Z1.1 The *Consultant* does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer*.
- Z1.2 Notwithstanding the above, the *Employer* may on written notice to the *Consultant* cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry.

Z2 Joint ventures

- Z2.1 If the *Consultant* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the *Employer* for the performance of this contract.
- Z2.2 Unless already notified to the *Employer*, the persons or organisations notify the *Employer* within two weeks of the Contract Date of the key person who has the authority to bind the *Consultant* on their behalf.
- Z2.3 The *Consultant* does not alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the *Employer* having been given to the *Consultant* in writing.

Z3 Change of Broad Based Black Economic Empowerment (B-BBEE) status

- Z3.1 Where a change in the *Consultant's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Consultant's* B-BBEE status, the *Consultant* notifies the *Employer* within seven days of the change.
- Z3.2 The *Consultant* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Employer* within thirty days of the notification or as otherwise instructed by the *Employer*.
- Z3.3 Where, as a result, the *Consultant's* B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Consultant's* obligation to Provide the Services.
- Z3.4 Failure by the *Consultant* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are those stated in core clause 91. The payment on termination includes a deduction of the forecast of the additional cost to the *Employer* of completing the whole of the services in addition to the amounts due in terms of core clause 92.1.

Z4 Confidentiality

- Z4.1 The *Consultant* does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Consultant*, enters the public domain or to information which was already in the possession of the *Consultant* at the time of disclosure (evidenced by written records in existence at that time). Should the *Consultant* disclose information to Others in terms of clause 23.1, the *Consultant* ensures that the provisions of this clause are complied with by the recipient.
- Z4.2 If the *Consultant* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Employer*.
- Z4.3 In the event that the *Consultant* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Consultant*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Consultant* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
- Z4.4 The taking of images (whether photographs, video footage or otherwise) of the *Employer's* project works or any portion thereof, in the course of Providing the Services and after Completion, requires the prior written consent of the *Employer*. All rights in and to all such images vests exclusively in the *Employer*.

Z5 Waiver and estoppel: Add to core clause 12.3:

- Z5.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

Z6 Provision of a Tax Invoice. Add to core clause 51

- Z6.1 The *Consultant* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer's* VAT number 4710303126 on each invoice he submits for payment.

Z7 Notifying compensation events

- Z7.1 Delete from the last sentence in core clause 61.3, “unless the *Employer* should have notified the event to the *Consultant* but did not”.

Z8 *Employer’s* limitation of liability

- Z8.1 The *Employer’s* liability to the *Consultant* for the *Consultant’s* indirect or consequential loss is limited to R0.00 (zero Rand)

Z9 Termination: Add to core clause 90.1, at the second main bullet point, fourth sub-bullet point, after the words “against it”:

- Z9.1 or had a business rescue order granted against it.

Z10 Delay damages: Addition to secondary Option X7 Delay damages (if applicable in this contract)

- Z10.1 If the *Consultant’s* payment of delay damages reaches the limits stated in this Contract Data for Option X7 or Options X5 and X7 used together, the *Employer* may terminate the *Consultant’s* obligation to Provide the Services.
- Z10.2 If the *Employer* terminates in terms of this clause, the procedures on termination are those stated in core clause 91. The payment on termination includes a deduction of the forecast of the additional cost to the *Employer* of completing the whole of the services in addition to the amounts due in terms of core clause 92.1.

Z11 Ethics

For the purposes of this Z-clause, the following definitions apply:

Affected Party means, as the context requires, any party, irrespective of whether it is the *Consultant* or a third party, such party’s employees, agents, or Subconsultants or Subconsultant’s employees, or any one or more of all of these parties’ relatives or friends,

Coercive Action means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an Affected Party to act unlawfully or illegally,

Collusive Action means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,

Committing Party means, as the context requires, the *Consultant*, or any member thereof in the case of a joint venture, or its employees, agents, or Subconsultants or the Subconsultant’s employees,

Corrupt Action means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,

Fraudulent Action means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation,

Obstructive Action means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an

investigation into allegations of Prohibited Action, and

Prohibited Action means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action.

- Z11.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.
- Z11.2 The *Employer* may terminate the *Consultant's* obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the *Consultant* did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the *Employer* has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the *Employer* can terminate the *Consultant's* obligation to Provide the Services for this reason.
- Z11.3 If the *Employer* terminates the *Consultant's* obligation to Provide the Services for this reason, the amounts due on termination are those intended in core clauses 92.1 and 92.2.
- Z11.4 A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the *Employer* does not have a contractual bond with the Committing Party, the *Consultant* ensures that the Committing Party co-operates fully with an investigation.

Z12 Insurance

Z12.1 Replace core clause 81 with the following:

- 81.1 When requested by a Party, the other Party provides certificates from his insurer or broker stating that the insurances required by this contract are in force.
- 81.2 The *Consultant* provides the insurances stated in the Insurance Table A from the *starting date* until the earlier of Completion and the date of the termination certificate.

INSURANCE TABLE A

Insurance against	Minimum amount of cover	For the period following Completion of the whole of the services or earlier termination
Liability of the <i>Consultant</i> for claims made against him arising out of his failure to use the skill and care normally used by professionals providing services similar to the <i>services</i>	Up to a maximum of the total contract value	For a period of 52 weeks
Liability for death of or bodily injury to a person (not an employee of the <i>Consultant</i>) or loss of or damage to property resulting from an action or failure to take action by the <i>Consultant</i>	<u>Loss of or damage to property:</u> The replacement cost where not covered by the <i>Employer's</i> insurance The <i>Employer's</i> policy deductible, as at Contract Date, where covered by the <i>Employer's</i> insurance <u>Bodily injury to or death of a person:</u>	For a period of 52 weeks

	The amount required by the applicable law.	
Liability for death of or bodily injury to employees of the <i>Consultant</i> arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law	For a period of 52 weeks

81.3 The *Employer* provides the insurances stated in the Insurance Table B.

INSURANCE TABLE B

Insurance against or name of policy	Minimum amount of cover or minimum limit of indemnity
Assets All Risk	Per the insurance policy document
Contract Works insurance	Per the insurance policy document
Environmental Liability	Per the insurance policy document
General and Public Liability	Per the insurance policy document
Transportation (Marine)	Per the insurance policy document
Motor Fleet and Mobile Plant	Per the insurance policy document
Terrorism	Per the insurance policy document
Cyber Liability	Per the insurance policy document
Nuclear Material Damage and Business Interruption	Per the insurance policy document
Nuclear Material Damage Terrorism	Per the insurance policy document

Z13 Nuclear Liability

- Z13.1 The *Employer* is the operator of the Koeberg Nuclear Power Station (KNPS), a nuclear installation, as designated by the National Nuclear Regulator of the Republic of South Africa, and is the holder of a nuclear licence in respect of the KNPS.
- Z13.2 The *Employer* is solely responsible for and indemnifies the *Consultant* or any other person against any and all liabilities which the *Consultant* or any person may incur arising out of or resulting from nuclear damage, as defined in Act 47 of 1999, save to the extent that any liabilities are incurred due to the unlawful intent of the *Consultant* or any other person or the presence of the *Consultant* or that person or any property of the *Consultant* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.
- Z13.3 Subject to clause Z13.4 below, the *Employer* waives all rights of recourse, arising from the aforesaid, save to the extent that any claims arise or liability is incurred due or attributable to the unlawful intent of the *Consultant* or any other person, or the presence of the *Consultant* or that person or any property of the *Consultant* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.
- Z13.4 The *Employer* does not waive its rights provided for in section 30 (7) of Act 47 of 1999, or any replacement section dealing with the same subject matter.
- Z13.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is

decommissioned.

Z14 Asbestos

For the purposes of this Z-clause, the following definitions apply:

AAIA	means approved asbestos inspection authority.
ACM	means asbestos containing materials.
AL	means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres per ml of air measured over a 4 hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL.
Ambient Air	means breathable air in area of work with specific reference to breathing zone, which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet.
Compliance Monitoring	means compliance sampling used to assess whether or not the personal exposure of workers to regulated asbestos fibres is in compliance with the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
OEL	means occupational exposure limit.
Parallel Measurements	means measurements performed in parallel, yet separately, to existing measurements to verify validity of results.
Safe Levels	means airborne asbestos exposure levels conforming to the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
Standard	means the <i>Employer's</i> Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles.
SANAS	means the South African National Accreditation System.
TWA	means the average exposure, within a given workplace, to airborne asbestos fibres, normalised to the baseline of a 4 hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA.

Z14.1 The *Employer* ensures that the Ambient Air in the area where the *Consultant* will Provide the Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM.

Z14.2 Upon written request by the *Consultant*, the *Employer* certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The *Consultant* may perform Parallel Measurements and related control measures at the *Consultant's* expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z14.1. Control measures conform to the requirements

stipulated in the AAIA-approved asbestos work plan.

- Z14.3 The *Employer* manages asbestos and ACM according to the Standard.
- Z14.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.
- Z14.5 The *Consultant's* personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable.
- Z14.6 The *Consultant* continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001.
- Z14.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer's* expense, and conducted in line with South African legislation.

Z15 Intellectual Property

- Z15.1 "Intellectual Property" means (a) patents, trademarks, service marks, rights in designs, trade names, copyrights and topography rights, in each case whether registered or not; (b) applications for registration of any of them; (c) rights under licences and consents in relation to any of them; (d) all forms of protection of a similar nature or having equivalent or similar effect to any of them which may subsist anywhere in the world.
- Z15.2 "Background Intellectual Property" means any and all Intellectual Property Rights that are not Foreground Intellectual Property, owned or controlled by the relevant Party or licensed to the relevant Party prior to or outside the Project but required for the purposes of the Project or for the proper use of the Technology.
- Z15.3 "Foreground Intellectual Property" means all Intellectual Property Rights and other matter capable of being the subject of intellectual property rights that is conceived, first reduced to practice or writing or developed in whole or in substantial part in the course of the Project and rights which are developed substantially as a result of the Project.
- Z15.4 The *Consultant* acknowledges that all right, title and interest in and to the Foreground Intellectual Property that may result or originate from or be developed in execution of the works vests in the Employer and that the *Consultant* has no claim of any nature in and to the Foreground Intellectual Property.
- Z15.5 The *Consultant* shall ensure that a copyright notice is incorporated or embossed or labelled on the Foreground Intellectual Property, to ensure that the *Employer* is reflected as the owner of the Foreground Intellectual Property.
- Z15.6 The *Consultant* retains the Background Intellectual Property rights in and to the *Consultant's* Background Intellectual Property made by or on behalf of the *Consultant* as part of the services.
- Z15.7 The *Consultant* gives to the *Employer* a non-terminable, non-transferable, irrevocable, non-exclusive, royalty-free licence to copy, use and communicate the Consultants documents containing Background Intellectual Property relating to the works (the "IP Documents"), including making and using modifications of them as supplied to the *Employer* under the contract, for the purposes of operating, maintaining, and repairing the works. The *Consultant* is not obliged to provide any proprietary manufacturing documents, designs, processes or specifications.

- Z15.8 This licence (a) applies throughout the actual or intended working life (whichever is longer) of the works; (b) the *Employer*, its authorised employees and wholly owned subsidiaries of the *Employer* in proper possession of the relevant part of the works, to copy, use and communicate the IP Documents for the purposes of completing, operating, using, maintaining, altering, adjusting, repairing, refurbishing and demolishing the works (the "Purposes"); and (c) in the case of IP Documents which are in the form of computer programs and other software, permit their copying, use and communication for the Purposes.
- Z15.9 The IP Documents are not, without the *Consultant's* written consent, used, copied or communicated to a third party by or on behalf of the *Employer* for any purpose, other than the Purposes.
- Z15.10 The *Consultant* procures that each Subcontractor executes all and any IP Documents, and take all and any other actions as may be required, in order to give effect to this licence.
- Z15.11 The *Employer* retains all Background Intellectual Property rights in all documents made by or on behalf of the *Employer* including all documents and requirements provided prior to or during the execution of the works. The *Consultant* does not, without the written consent, of the *Employer*, copy, use or issue to a third party any of these documents and requirements except for the purposes of executing the services.
- Z15.12 Either Party procures that any third party executes confidentiality undertakings not to disclose to any other third parties, any of the *Employer's* documents and requirements at all, in respect of the *Employer*, or the IP Documents other than for the Purposes, in respect of the *Consultant*.
- Z15.13 Third Party Claims:
- 13.1 In the event of any claims being made or actions brought against the *Employer*, on the ground that the *Consultant* infringed any patent, trademark or copyright, the *Consultant* is notified thereof and at its own expense, conducts all negotiations in consultation with the *Employer* for the settlement of the claim and litigation that may arise from such alleged infringement.
 - 13.2 Save where the *Consultant* fails to take over the conduct of the negotiation or litigation within a reasonable time of the notification of the alleged infringement, the *Employer* does not make any admission which might be prejudicial to the *Consultant's* position.
 - 13.3 The *Employer*, at the request and the cost of the *Consultant* affords it all reasonable technical assistance that the *Employer* is able to provide for the purpose of contesting any such claim or action.
 - 13.4 Should it be held in any such action that any such protected rights has been infringed, as definitely stated by a judgment of the court before which the action is brought, the *Consultant*, at its own expense and in consultation with the *Employer*:
 - 13.4.1 procure for *Employer* the right to continue to use the affected item or design; or
 - 13.4.2 replace the said affected item or design with a non-infringing item; or
 - 13.4.3 design of equivalent quality or modify such affected item or design so as to make it non-infringing without affecting the quality
 - 13.5 Notwithstanding anything contained in this contract, the foregoing sets forth the entire responsibility of *consultant* with respect to claims relating to infringement.
 - 13.6 Where it is alleged that the *Employer* has committed an infringement as intended vis-à-vis the *Consultant* as set the *Employer* has the same rights and obligations as the *Consultant*, mutatis mutandis, as regards such alleged infringement.

Z16 Supplier Development, Localisation and Industrialisation (SDL&I)

- Z16.1 Skills for development will be negotiated with the Consultant at Task Order stage and the number to be trained will be finalized because of the ad hoc nature of the work. Where feasible at the task order stage the Owner's Engineer will be contracted to sponsor bursaries to students in Engineering or equivalent discipline as determined by SDL&I and cross functional team. Skills candidates shall be sourced from South Africa. The purpose is to provide these candidates with skills and workplace experience to increase the opportunity for them to be employable within the

industry. The supplier may develop the candidates directly, through their supply network or through the SETA accredited training providers.

Z16.2 SDL&I Penalty and Performance Security

As security for the fulfilment of all SDL&I obligations, Eskom will apply a penalty of 2,5% of every invoice amount (excluding VAT) for failure to submit SDL&I performance reports every quarter; or failure to meet the SDL&I obligations in a contract.

Alternatively, the *Consultant* shall provide a bond equivalent to 2% of the Contract Value and shall only be released to the *Consultant* upon fulfilment of all SDL&I Obligations.

The contractor shall submit a monthly report to Eskom in accordance with Data Collection Template on their compliance with their SDL&I obligations

C1.2 Contract Data

Part two - Data provided by the *Consultant*

[Instructions to the tendering consultant: (delete these notes in the final draft of a contract)]

1. The tendering consultant is advised to read both the NEC3 Professional Services Contract, April 2013 and the relevant parts of its Guidance Notes (PSC3-GN)¹ in order to understand the implications of this Data which the tenderer is required to complete. An example of the completed Data is provided on pages 158 & 159 of the PSC3 April 2013 Guidance Notes.
2. The number of the clause in the PSC3 which requires the data is shown in the left hand column for each statement however other clauses may also use the same data.
3. Whenever a cell is shaded in the left hand column it denotes this data is optional in PSC3 and would be required in relation to the option selected. The *Employer* should already have made the selection and deleted the rows not required.

Completion of the data in full, according to Options chosen, is essential to create a complete contract.

Clause	Statement	Data
10.1	The <i>Consultant</i> is (Name): Address Tel No. Fax No.	
22.1	The <i>key people</i> are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name: Job Responsibilities: Qualifications: Experience:	
Only if required		CV's (and further <i>key persons</i> data including CVs) are appended to Tender Schedule entitled _____.
11.2(3)	The <i>completion date</i> for the whole of the services is	
11.2(10)	The following matters will be included in the Risk Register	

¹ Available from Engineering Contract Strategies Tel 011 803 3008 Fax 011 803 3009 or www.ecs.co.za

11.2(13)	The <i>staff rates</i> are:	name/designation	rate
	Either complete here or cross refer to a schedule in Part C2.2		
25.2	The <i>Employer</i> provides access to the following persons, places and things	access to 1 2 3	access date
31.1	The programme identified in the Contract Data is		
50.3	The <i>expenses</i> stated by the <i>Consultant</i> are	item	amount
G	Term contract		
11.2(25)	The <i>task schedule</i> is in		

PART 2: PRICING DATA
PSC3 Option G

Document reference	Title	No of pages
C2.1	Pricing assumptions : Option G	[•]
C2.2	<i>Staff rates, expenses and the task schedule.</i>	[•]

C2.1 Pricing assumptions: Option G

1. How work is priced and assessed for payment

From Option G: Term contract

Identified and defined terms	11 11.2	(17) The Price for Services Provided to Date is, for each Task, the total of - the Time Charge for work which has been completed on time based items on the Task Schedule and - a proportion of the lump sum price for each other item on the Task Schedule which is the proportion of work completed on that item. (20) The Prices are - the Time Charge for items described as time based on the Task Schedule and - the lump sum price in the Task Schedule for each other item.
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From the Core Clauses:

Identified and defined terms	11.2	(13) The Time Charge is the sum of the products of each of the <i>staff rates</i> multiplied by the total staff time appropriate to that rate properly spent on work in this contract.
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and

Assessing the amount due	50.3	The amount due is - the Price for Services Provided to Date, - the amount of the <i>expenses</i> properly spent by the <i>Consultant</i> in Providing the Services and - other amounts to be paid to the <i>Consultant</i> less amounts to be paid by or retained from the <i>Consultant</i>.
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Any tax which the law requires the *Employer* to pay to the *Consultant* is included in the amount due.

In effect Option G is a cost reimbursable form of contract with work ordered by the *Employer* on a Task by Task basis using the Task Schedule to compile the cost of carrying out a Task.

Expenses are calculated separately and added to the amount due for the services provided.

2. Staff rates and expenses

Tendering consultants are advised to consult the NEC3 Professional Services Contract Guidance Notes before entering *staff rates* into Contract Data, or in section C2.2 which follows.

This is because *staff rates* can be established in one of three ways:

- rates for named staff,
- rates for categories of staff, or
- rates related to salaries paid to staff.

Rate adjustment for inflation, if necessary, can be based either on actual salary adjustments or by using Option X1: Price adjustment for inflation. See pages 13 and 14 of the PSC3 Guidance Notes.

Expenses associated with employing a staff member in Providing the Services can be listed separately either by the *Employer* in Contract Data provided by the *Employer* or by the *Consultant* in Contract Data provided by the *Consultant*.

As only the *expenses* listed may be claimed by the *Consultant*, all other cost to the *Consultant* associated with Providing the Services must be included within the *staff rates*.

Rate adjustment for inflation of *expenses* is explained on page 15 of the PSC3 Guidance Notes.

3. The function of the Task Schedule

The Task Schedule may include items of work to be paid for on a rate (Time Charge) or on a lump sum price for the item. Any work ordered during the term of the contract – i. e. before the Completion Date – for which there is no priced item in the Task Schedule is priced using the compensation event procedure and the resulting Price is added into the Price List.

The *task schedule* is prepared by the *Employer* for the *Consultant* to price, or may be prepared jointly with the *Consultant*. It is typically priced in two parts as items of work to be carried out on a time basis and lump sum prices for other items of work. The task schedule must be as complete as possible and fully representative of all the work and *services* which the *Employer* may require the *Consultant* to carry out. The only unknown is when the work is to be carried out; the Task Order will be used to instruct when work to be done.

C2.2 Staff rates, expenses & the task schedule

This section can be used when the *staff rates* and *expenses* are considerable in number and more conveniently located here than in the Contract Data. Entries in the Contract Data should refer to this section of Part 2.

State whether the *staff rates* and *expenses* exclude or include VAT.

1. The *staff rates* are:

No.	Designation - the pricing schedule to be read in conjunction with the scope of work Annexure C (Job Profiles)	Rate per {hour} excluding VAT
	All Engineering Disciplines:	
1.	Chief Engineer (Pr. Eng), with 10 years and above post registration	
2.	Senior Engineer (Pr. Eng), with 6 -10 years post registration	
3.	Candidate Engineer (Can. Eng), with 2 years minimum post registration	
4.	Chief Technologist (Pr. Tech), with 10 years and above post registration	
5.	Senior Technologist (Pr. Tech), with 6 -10 years post registration	
6.	Candidate Engineer (Can. Tech), with 2 years minimum post registration	
7.	Candidate Engineer (Can. Techn), with 2 years minimum post registration	
8	Chief Draughtsperson, with national diploma / N4, with 8 years minimum experience	
9	Senior Draughtsperson, with N3, with 4 years minimum experience	
10	Chief Land Surveyor (Pr.ES & PLS), with 7 years and above post registration	
11	Senior Land Surveyor (Pr. Tech), with 4 -7 years post registration	
12	Candidate Land Surveyor (Can.LS), with 2 years minimum and diploma in land surveying	
13	Chief Technologist GIS (PrGISc. Tech), with 7 years and above post registration	
14	Senior Technologist GIS (PrGISc. Tech), with 4 -7 years post registration	
15	Candidate Spatial Information Officer (GIS), with 2 years minimum experience	

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2. The expenses are:

No.	Expense item	Amount / rate excluding VAT
1	Travelling to site per kilometre – NTCSA rate will be utilised	R4.76
2	All Domestic flights will be paid on actuals	
3	Car Hire Class B	

3. The task schedule

The following format could be used:

No.	Items of work to be carried out on a time basis

No.	Items of work priced on a lump sum basis	Price (excluding VAT)

Document reference	Title	No of pages
C3.1	This cover page <i>Employer's Scope</i>	1
C3.2	<i>Consultant's Scope</i>	
	Total number of pages	24

C3.1: EMPLOYER'S SCOPE

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1. Description of the services

1.1 Executive overview

The external engineering *Service Providers* are required to augment Transmission Engineering resources when the need arises, through the provision of specialised engineering services. The scope of services encompasses the engineering disciplines in areas which lack sufficient specialised skills and capabilities. The *Service Providers* will work with Transmission resources to support the business when NTCSA does not have adequate internal resources with the required skills and competencies.

The *Employer* will, depending on services required, appoint the *Service Providers* (as and when required). Resource requisitions will be issued to the *Service Provider* with defined scopes and / or expertise required. Once CVs are received, resources will be evaluated on their qualifications, experience, and expertise and if successful be appointed for the services through the issuing of a Task Order (Budget Estimate).

For each of the services required, a short description of the service has been included on the listed job profiles (Addendum E: Engineering Job Profiles) where more details are also provided.

NB: The standard place of work is Eskom Megawatt Park, Johannesburg unless otherwise agreed with the *Service Provider*.

1.2 Interpretation and terminology

The following abbreviations are used in this Scope:

Abbreviation	Meaning given to the abbreviation
APS	Accounts Payable Services
BBBEE	Broad-Based Black Economic Empowerment
CIPC	Companies and Intellectual Property Commission
ECC	Engineering and Construction Contract
EME	Exempted Micro-Enterprise
GR	Goods Receipt
IEC	International Electrotechnical Commission
IPP	Independent Power Producer
ISO	International Organization for Standardization
NEC	New Engineering Contract
NRS	National Regulatory Standards

OHS	Occupational Health and Safety
PC	Personal Computer
PPPFA	Preferential Procurement Policy Framework Act
QMS	Quality Management System
QSE	Qualifying Small Enterprise
RDP	Reconstruction and Development Programme
SABS	South Africa Bureau of Standards
SC	Supply Contract
SDL&I	Supplier Development, Localisation, and Industrialisation
SETA	Sector Education and Training Authority
SHE	Safety, Health, and Environment
SOC	State-Owned Company
VAT	Value Added Tax

2. Specification and description of the services

2.1 QUALITY MANAGEMENT

2.1.1 System requirements

The *Service Provider* shall have a fully documented, implemented and maintained Quality Management System which complies with the requirements of the ISO 9001 or their quality management system shall carry valid certification from an acceptable QMS Certification body. The *Service Provider* to provide a quality plan within 30 days of contract signing and once accepted will form part of the contract documentation.

Performance evaluation templates will be discussed and agreed after contract award by both the *Employer* and the *Service Provider*. Performance will be measured twice a year by the *Service Provider* and feedback will be provided to the *Employer*.

A non-conformance report will be issued if the *Service Provider* does not meet *Employer* quality requirements. If there are any defects as per technical specifications, the non-conformance report will be issued and monitored until closure.

2.2 HEALTH, SAFETY, ENVIRONMENTAL

The *Service Provider* shall always comply with the health and safety requirements prescribed by law and the *Employer* as they apply to the *services*. Failure to comply shall result in the *Employer* suspending the execution of services and removing the *Service Provider* from site until compliance is achieved. The *Employer* may cancel a Task Order and/or terminate the contract depending on the situation and risks to people, plant and equipment, reputation, and the *Employer's* business of electricity supply.

The *Service Provider* shall comply with the health and safety requirements contained on the Task Order. The relevant Site / Project Manager shall require the *Service Provider* to attend SHE Induction training provided by the *Employer*. It is essential that the *Service Provider* is conversant with Eskom safety procedures training prior commencing any work on site.

If the *Service Provider* may be required to work on Eskom premises, where health and safety requirements additional to those prescribed by law apply.

2.3 Life Saving Rules

In the interest of promoting a safe and healthy working environment, the NTCSA Executive Committee has approved the implementation of life saving rules, to improve safety in the organisation. These rules will also be applicable to all contracting staff.

The business is concerned about the emotional, social as well as economic effect of all these unnecessary incidents, and would like to correct behaviour pro-actively.

These rules are determined beforehand to enable the organisation to clearly communicate the established Life Saving Rules and how to deal with non-compliance to the workforce prior to the implementation of such rules.

Failure by any person or *Service Providers/Contractors* engaged in doing business with Eskom to adhere to these rules, will lead to serious action being taken with serious consequences (including being refused access to site). These actions include termination of service of an individual and even blacklisting of *Service Provider/Contractors* not taking the rules seriously. It is therefore strongly advised that these rules be taken seriously, communicated to all your staff, ensure that they all understand the rules, understand the consequences of violating a rule and sign a document stating that they understand and acknowledge the implications of these rules.

ESKOM LIFE SAVING RULES ARE:

Rule 1: Open, Isolate, Test, Earth, Bond and/or Insulate before touch (above 1 000 V)

Rule 2: Hook up at heights

Rule 3: Buckle up

Rule 4: Be sober

Rule 5: Ensure that you have a permit to work

2.4. Security management requirements

The Consultant shall follow all site entry requirements established by the *Employer*, particularly those outlined in the Critical Infrastructure Protection Act 8 of 2019.

3. SECONDARY PLANT ENGINEERING AND TECHNOLOGY MANAGEMENT

The provision of engineering services to be contracted on a time basis to contribute to Eskom's outputs in terms of the disciplines and outputs listed below.

3.1 Protection, Telecommunications, Metering, Telecontrol, DC, Physical Perimeter Security and Physical Access Control Systems Application Design / Project Engineering

Application design refers to the engineering activities associated with the design of power network infrastructure; utilising standard developed products which are typically available off Supply Contracts that Eskom has established with third party vendors. Engineering activities and design outputs include:

- Design drawings (to-build and as-built),
- Telecontrol datapoint definitions,
- Substation / IED IEC 61850 CID, SCD, ICD database file design / creation
- Substation IP network design
- Interlocking rule design / definition / creation
- Protection design
- DC system sizing and design
- DC and AC board reticulation design,
- Control Room Layout in terms of panel placement, emergency evacuation requirements, lightning, access and overhead racking load calculations
- Telecommunication specific Voice, Videoconference, IP router, Radio and Fibre Optic Network designs
- CCTV, Volumetric Alarm, Perimeter Intrusion detection and Electric fence designs

Engineering processes and deliverables must comply with statutory regulations and Eskom Transmission governance, philosophies, standards, and accepted practices. They should be delivered to Eskom in a specified format and on designated media for each task order. Additionally, all designs require approval from a competent ECSA registered professional.

3.2 Protection, Telecommunications, Metering, Telecontrol, DC, Physical Perimeter Security, Physical Access Control Systems and Associated Cyber Security Technology Management / Engineering

Technology management refers to engineering activities to establish technology direction / goals, planning to achieve these goals, concept, basic and detailed designs for the establishment of new technologies, sourcing strategies and mechanisms, new technology change management, support activities to sustain and achieve best value from technologies and end of life planning. Engineering activities and design outputs include:

- Compilation of user requirements, philosophies, specifications and / or technical input to commercial documentation against which tenders can be issued for the design, development, manufacture, testing and subsequent supply.
- NEC ECC and SC project and contract management.
- Technology change management including the development of Settings, Maintenance and Operating Documentation.
- Development / Population of Configuration Management Systems and PC based Product Configuration Tools.
- Compilation of Engineering Instructions and / or associated product configurations for changes to the installed design base.
- Development and / or presentation of training courses associated with the introduction of new technology, maintenance and operating thereof.
- Cybersecurity risk, penetration, and vulnerability assessment as well as architecture standards and frameworks development and / or design reviews
- Incident investigations
- Specialised studies / analysis relating to existing infrastructure or to facilitate the creation of new infra-structure.

Engineering processes and deliverables must comply with statutory regulations and Eskom Transmission governance, philosophies, standards, and accepted practices. They should be delivered to Eskom in a specified format and on designated media for each task order. Additionally, all designs require approval from a competent ECSA registered professional.

4. POWERLINE ENGINEERING

The design scope is covered in the sections below. There may be other specialised studies not mentioned here that will be needed at times for specialised and complex projects. All designs will follow the NTCSA governance process with respect to the formal line design process.

ELECTRICAL

- Conductor Optimization:
- Insulator selection:
- Earthing design:
- Line performance studies:
- Ground wire selection
- Telecommunications designs

STRUCTURAL

- Tower selection
- Tower loading analysis (wind and weight spans)
- Telecommunication tower and related infrastructure design, analysis, detailing, testing if needed, and prototyping.
- Tower design

HARDWARE SELECTION

- Selection and design of relevant hardware for the selected tower, conductor, and insulator combination.
- Development of outline drawings for selected hardware
- Drawings for new hardware designs

FOUNDATIONS

- Geotechnical studies
- Foundation designs
- Soil nominations and analysis of nominations
- Foundations refurbishment methods

LINE PROFILING

- Tower spotting and line optimisation on PLSCADD
- Creation and review of method 1 and method 4 seed files
- Preliminary and detailed visual inspections (ground and aerial)

ENVIRONMENTAL CONSIDERATIONS

- Electromagnetic interference (fences, water pipes, Telkom lines etc)
- Lightning prevalence analysis
- Prevalent pollution levels
- Optimal routing of the line and land/ servitude use

CORROSION PROTECTION

- Steel poles
- Hardware
- Phase conductor and Earthwire
- Identification of corrosion levels on components

SPECIALISED STUDIES AND SERVICES (NOT LIMITED TO)

- Corona measurements
- Wayleave application analysis (Not limited to design related impacts emanating from landowner, environmental and community issues)
- Line impedance measurements
- Insulation coordination
- Ferranti and voltage unbalance studies
- Upgrading and upgrading of existing lines
- Electromagnetic field measurements and analysis (Desktop and field)
- Tower detailing (Draughting)
- Coupling studies (fences – electrified and non-electrified, railway lines, other powerlines, pipelines etc.)
- Cathodic protection studies (pipelines and railway lines)
- Specialised geotechnical studies (undermining, landfill etc.)
- Surveying (including, but not limited to digitizing and spatial information analysis)
- Engineering quality assurance at construction sites
- Project lead designer skills

5. SUBSTATION ENGINEERING

5.1 ELECTRICAL

- Produce electrical designs (AIS/GIS/HVDC) on Transmission projects for Concept, Definition & Execution Phases on varying projects.
- Technical specifications reviews
- Application and adherence to Eskom Design Standards, Specifications, best practises, NRS standards, SABS and IEC standards, Occupation Health, and Safety (OHS) act, Construction regulations, etc.
- Knowledge and application of different Technologies used for design
- Knowledge and application of the different busbar philosophies
- Produced CAD based design drawings (Microstation)
- Participation in Project life cycle technical hold points such as:
 - Substation design reviews,
 - PDRA (Project Development Readiness Assessments) and
 - Stakeholder and site meetings
 - Technical Tender Evaluations
- Specialized studies
 - Earthing studies in CDEGS
 - Insulation co-ordination
 - Lightning protection studies
 - Harmonic studies
 - NER optimization studies
 - Floodlights and security lighting studies
 - Life cycle costing
 - Heating/ventilation and air conditioning
 - Lighting studies using Relux
 - Design verification (Field measurements)
 - Corona and Radio Interference
- Field measurements
 - Electric & Magnetic field measurements
 - Audible noise measurements
 - Soil Resistivity Measurements
 - Grid Resistance Measurements
 - Earthing Continuity Measurements
 - Lighting (lux) measurements
 - Earthing systems
 - Grid Resistance Measurements
 - Earthing Continuity Measurements
 - Lighting measurements

- Site Assurance/Investigations/Inspections during construction
- Post-construction
 - Design verifications (Designed vs As built)
 - Drawing mark-ups
 - Audits
- Insulators
- Hardware
- Conductors
- HV cable systems
 - Electrical Design
 - HV cable selection and specification (Conductor, Sheath, outer layer, Insulation, etc.).
 - HV Cable systems design.
 - Construction, maintenance, and related activities

5.2 CIVIL AND STRUCTURAL

Civil designs for project development on transmission schemes associated with the network integration of power from Power Stations, IPP projects, network strengthening, expansion schemes and refurbishment projects.

- Site Plan/Terrace
 - Cut & Fill
 - Application of the geotechnical report
 - Drainage
 - Foundation
 - Steel Works (Structural)
 - Concrete Works (Foundations, Roofs, Plinths and Trenches)
 - Embankments
 - Infrastructure tunnel designs
 - Passive and Active Fire Protection
 - Construction Regulations
 - Architectural design
 - Roads (Site access roads and terrace roads)
 - Fencing
 - Buildings e.g., Control Room, Switch Rooms, Access Control Building, Cladded Stores, Workshops, Consumable Stores etc.
 - Substation Security
- Produce required Civil design Drawings.
- Participate in:
 - Substation design reviews

- Technical specifications reviews
 - Technical Tender Evaluations
- Civil Investigations and Studies
- Specialized studies
 - Geotechnical Studies (Factual and Interpretive)
 - Structural analysis and design
 - Concrete design
 - Life cycle costing
 - Internal Arc pressure and other pressure related calculations for buildings
 - Compaction design
 - Road and river crossing designs
 - HV, MV and LV tunnel design
- Site Assurance/Investigations/Inspections during construction
- Post-construction design verifications (as-designed vs as-built)
- Post-construction design drawing mark-ups
- Audits
 - Structures
 - Foundations
- Quantity surveying services
- Construction Regulations
- Development of RAM
- Hydrological Studies

6. INTEGRATION ENGINEERING

Fulfil the roles below for project development on transmission schemes associated with the network integration of power from Power Stations, IPP projects, network strengthening, expansion schemes and refurbishment projects.

- Customer Interface for Engineering work requests.
- Representation and liaison with Project Departments
- Co-ordinate a multidisciplinary design team to produce integrated designs.
- Negotiate and contract with all stakeholders including internal and external departments.
- Manage handshake documents between Engineering disciplines.
- Track, manage and report on progress including time, cost and quality related to all project portfolios.
- Technical governance approval for major project schemes.
- Manage and co-ordinate workflow / design process
- Manage / report design changes during construction

7. DESIGN DRAUGHTING

- Provide Engineering Drafting (Substations: Electrical and Civil, PTM&C, Line Engineering) using Bentley Microstation
- Create drawing master files
- Produce project design drawings (Electrical, Secondary plant and Civil)
- Update marked up drawings
- Check in/out drawings using Eskom approved configuration management systems
- Print drawings as per requirements
- Prepare hard copies of drawings for issue
- All soft copies to be in Microstation V8i format
- Steel detailing

8. CONSTRAINTS ON HOW THE CONSULTANT PROVIDES THE SERVICES.

8.1 Management meetings Constraints on how the *Service Provider* Provides the Services

- a) The *Service Provider* and the *Employer* will review the Deliverables in meetings organized and scheduled by the *Employer*.
- b) The *Service Providers* ensure that all follow-up actions are carried out within the time stipulated.
- c) The *Employer* may, in addition to the scheduled review meetings indicated, request additional reviews.
- d) The *Employer* may involve independent third parties in any of the review meetings.
- e) The requesting manager will assess the performance of their resources based on the duration of the assignment. Assignment over 6 months resource to be assessed for performance on a bi-annual basis and below 6 months the Managers will use their discretion.

8.2 Progress Meetings

- a) Regular meetings are held between the *Employer* and *Service Providers* to review progress according to the Accepted Programme and to discuss early warnings.
- b) The frequency and venue of progress meetings are agreed upon by the *Service Providers* and the *Employer*.
- c) A schedule for progress meetings is agreed upon between the *Service Providers* and the *Employer*.
- d) Minutes of these meetings are maintained by the *Employer*.
- e) NB: Communication mandated by the contract follows the Conditions of the Contract.
- f) Regular meetings of a general nature may be convened and chaired by the *Employer* as follows:

Title and purpose	Approximate time & interval	Location	Attendance by:
Overall contract progress	Quarterly	Eskom	<i>The Employer and Service</i>

and feedback to Steering Committee		Megawatt Park or other venue as advised	<i>Provider</i> representatives and any other members as specified in terms of reference.
Overall task order progress and feedback to applicable business unit, to be managed within contractual and process limitations	Monthly	Eskom Megawatt Park or other venue as advised	Eskom Section representatives and <i>Service Provider</i> representatives
Overall task order progress and feedback to applicable business unit, to be managed within contractual and process limitations	Weekly or as and when required	Eskom Megawatt Park or other venue as advised	Eskom Section representatives and <i>Service Provider</i> representatives

Attendees shall have the necessary delegated authority to make decisions in respect of matters discussed at such meetings and this is to be managed within contractual and process limitations.

The Meetings of a specialist nature may be convened as specified elsewhere in this Scope or if not so specified by persons and at times and locations to suit the Parties, the nature, and the progress of the *services*. Records of these meetings shall be submitted to the *Employer* by the person convening the meeting within five days of the meeting.

All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register shall not be used for the purpose of confirming actions or instructions under the contract as these shall be done separately by the person identified in the *conditions of contract* to carry out such actions or instructions.

8.3 Service Provider's key persons

An organogram from the *Service Provider* showing key persons and their lines of authority / communication shall be submitted to the *Employer* within 4 (four) weeks of the Contract Date. The *Service Provider* shall be required to notify the *Employer* of the contact details, leave and alternative where applicable in respect of each key person. Any changes in this regard shall be notified in writing in advance or within 1 (one) week of occurring and measures taken to avoid negative impacts on the *Service Provider's* ability to deliver the services.

8.4 Provision of bonds and guarantees

The form in which a bond or guarantee required by the conditions of contract (if any) is to be provided by the Consultant is given in Part 1 Agreements and Contract Data, document C1.3, Sureties.

The *Employer* may withhold payment of amounts due to the Consultant until the bond or guarantee required in terms of this contract has been received and accepted by the person notified to the Consultant by the *Employer's Agent* to receive and accept such bond or guarantee. Such withholding of payment due to the Consultant does not affect the *Employer's* right to termination stated in this contract.

8.5 Documentation control and retention

8.5.1 Identification and communication

All contractual communication will be in the form properly compiled letter, forms attached to emails and as a message in the email itself. All letters must have company overhead. The phone call communication is allowed in case of emergency; however, it must be followed by written communication. Correspondence on a day-to-day basis may be directed to other parties within the *Employer's* organisation but care must be taken not to violate contract conditions and other provision in terms of the contract.

8.5.2 Retention of documents

5 Years after the completion of the services.

8.6 Records and forecasting of expenses

Clear records of expenses shall be maintained by the Consultant and submitted on request to the *Employer* for verification. Only invoices from *Service Providers* (e.g., hotel or car hire company) showing actual expenses incurred in the case of T&S expenses shall be accepted for processing by the *Employer*.

8.7 Records and forecasting of the Time Charge

The Consultant shall submit forecast of time charges for each assessment period and maintain records thereof. Clear records of hours worked or timesheets in respect of all time charges shall be kept by the Consultant and shall indicate the resource utilised, location, duration, and times, associated expenses incurred, and a summary of the services rendered which shall be cross-referenced to deliverables rendered. The records of hours shall indicate the Requesting Manager to whom services were delivered. The Requesting Manager shall review all time sheets during assessment and the Consultant shall obtain signed timesheets and assessment documentation from Requesting Manager and submit the assessment package to the *Employer's Agent* for processing. The Consultant shall maintain records of all documentation and make available to the *Employer* any or all such documentation on request.

8.8 Invoicing and payment

The Consultants will invoice a month in arrears; however, the Consultants will submit invoices to the relevant Engineering representative five (5) working days before submitting final Tax invoices to Accounts Payable Services (APS) to allow Goods receipt (GR's) to be done timeously and avoid invoices being parked in the system. The process can be amended as required from time to time per mutual agreement between both

parties. The invoice should be accompanied by relevant supporting documents and calculations supporting the amount invoiced.

The Consultant shall address the tax invoice to NTCSA and include on it the following information:

- Name and address of the Consultants and the *Employer*.
- The contract number and title.
- Consultant's VAT registration number.
- The *Employer's* VAT registration number 4740101508.
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT.
- Date of the invoice
- Task Order number.
- Description of the services and quantities
- Period invoiced
- Name of the employee and project/site
- Purchase Order number

8.9 Contract change management

N/A

8.10 Inclusions in the programme

N/A

8.11 The Parties use of material provided by the *Consultant*

8.11.1 Employer's purpose for the material

All rights to material belong to *Employer* for purposes stated in the Scope.

8.11.2 Restrictions on the *Consultant's* use of the material for other work

As per the Task Order.

8.11.3 Transfer of rights if Option X 9 applies

The *Employer* owns the Consultant's rights over material prepared for this contract by the Consultants. The Consultant provides to the *Employer* the documents which transfer these rights to the *Employer*.

8.12 Management of work done by Task Order

Refer to Addendum B for the format of a Task Order which shall be used by the *Employer* as the means of instructing the Consultant to deliver services. No work shall be carried out without a signed Task Order

issued by the *Employer* and a subsequent approved and fully signed budget estimate and a purchase order for each service request.

The Task Order shall specify the scope of services, deliverables, starting and completion dates and the cost allocation. The Consultant shall deliver services within the constraints stipulated on the Task Order and engage the *Employer* as soon as the Consultant becomes aware of any risk in this regard. Any work executed outside the parameters stipulated on the Task Order, including cost, shall be for the Consultant's account notwithstanding delivery and acceptance of services that may be made by the *Employer* or people in the *Employer's* organisation.

All Expenses shall be paid for by the Consultant and reimbursed at cost after assessment. The Consultant shall include itemised estimated expenses in all proposals in response to Requests for Proposals issued by the *Employer*. Forecasts of estimated Expenses shall be submitted to the *Employer's* Requesting Manager for acceptance at the Assessment meeting. Expenses that are incurred without the *Employer's* prior acceptance in writing shall not be reimbursed by the *Employer*.

The Consultant shall handover to the Requesting Manager all the documents for the services rendered and a Requesting Manager shall sign a transmittal form as a proof of acceptance of all the documents handed over to them.

8.13 Health and safety

The Consultant shall always comply with the health and safety requirements prescribed by law and the *Employer* as they apply to the services. Failure to comply shall result in the *Employer* suspending the execution of services and removing the Consultant from site until compliance is achieved. The *Employer* may cancel a Task Order and/or terminate the contract depending on the situation and risks to people, plant and equipment, reputation, and the *Employer's* business of electricity supply.

The Consultant shall comply with the health and safety requirements contained on the Task Order. The relevant Site / Project Manager shall require the Consultant to attend SHE Induction training provided by the *Employer*. It is essential that the Consultant is conversant with Eskom safety procedures training prior commencing any work on site.

If the Consultant may be required to work on Eskom premises, where health and safety requirements additional to those prescribed by law apply, refer to Section 2.2 of this document for applicable SHEQ policies and procedures.

8.13.1 Medical Surveillance Programme

The Consultant shall ensure that the employees are registered on a medical surveillance programme and are in possession of a valid medical fitness certificate, completed in South Africa. The certificate of fitness should be relevant to the type of work (risk based) that the employee will be exposed to. This will require

each employee to have a risk-based person job specification that will be used as a basis for medical examination.

The Consultant must ensure that their resources (employees) have undergone pre-entry medical examination before starting work on site, no employee will access site without a valid medical fitness certificate. During the progress of the contract, the resources shall undergo the periodic medical examination over a period recommended based on the exposure. Upon completion or as and when employees' leave the project, an exit medical examination must be done for all employees involved in the project.

8.14 Procurement

8.14.1 BBBEE and preferencing scheme

8.14.1.1 Section 1: Objective Criteria

The inclusion of objective criteria in an enquiry is not mandatory but a condition for contract award, and if included, this must align with the requirements of the PPPFA [clause 2(1)(f)] and be clearly stated in the enquiry together with the consequence of such objective criteria (i.e., if the tenderer does not meet objective criteria; it may lead to the second-ranked tenderer being recommended for award).

8.14.1.2 Subcontracting

Mandatory subcontracting on contracts above R30 million as a condition for contract award If feasible to subcontract for a contract above R30 million, Eskom:

- a) must apply subcontracting to previously designated groups.
- b) must advertise the tender with a specific condition for contract award that the successful

tenderer must subcontract a minimum of 30% of the value of the contract to:

- a) An EME or QSE which is at least 51% owned by black people.
- b) An EME or QSE which is at least 51% owned by black people who are youth.
- c) An EME or QSE which is at least 51% owned by black people who are women.
- d) An EME or QSE which is at least 51% owned by black people with Disabilities.
- e) An EME or QSE which is 51% owned by black people living in rural or underdeveloped areas or townships.
- f) A cooperative which is at least 51% owned by black people.
- g) An EME or QSE which is at least 51% owned by black people who are military veterans.

Tender Returnable if the above element is a requirement.

- Proof of a sub-contract agreement/s must be submitted.
- CSD report of subcontractors
- Sub-contractor/s B-BBEE certificate / sworn affidavit must be submitted.

Subcontracting, in this instance, will be treated as a condition for contract award. A supplier awarded a contract may not subcontract more than 25% of the value of the contract to any other entity that does not have an equal or higher B-BBEE status level of a contributor than the supplier concerned unless the contract is subcontracted to an EME that has the capability and ability to execute the subcontract.

Note: The above stated will be applicable at task order level in instances where there is a task order that exceeds R30 million rands where feasible.

8.14.1.3 Section 2: Other SDL&I Objectives in line with RDP Goals

1. **BBBEE requirements:** All tenderers must at a minimum maintain their B-BBEE status throughout the contract period.
2. **Tenderers** are required to propose against the following training initiatives

Category	Eskom Target	Tenderers Proposal
Trainee engineers (Electrical/QS/Mechanical)	10	
Engineering Bursaries (Electrical/QS/Mechanical)	10	

The successful supplier shall develop/sponsor Engineers, over the duration of the contract which is five years. One skill shall be developed through sponsoring bursaries or internal training, for every thirteen million Rands (R13 000 000.00) that will be spent by Eskom to the company, to achieve the maximum number of (20) twenty. Therefore, the supplier may develop the candidates directly or through their supplier network. The supplier may also utilize the services of the relevant SETA accredited training providers.

3. Job Opportunities

Suppliers should propose the number of jobs to be created and retained as a direct result of this contract. This proposal must be done in the table below.

Category	Jobs to be retained	Jobs to be created Target	Jobs to be created Proposal
Management			
Expert Skills			
Skilled workers			
Semi-skilled			
Unskilled			
Total			

Section 3: SDL&I Penalty and Performance Security

Eskom will apply a penalty of 2.5% of the invoice amount for failure to meet SDL&I obligations.

As security for the fulfilment of all SDL&I obligations, Eskom will apply a penalty of 2.5% of every invoice amount (excluding VAT) for failure to submit SDL&I performance reports every quarter; **or** failure to meet the SDL&I obligations in a contract.

Section 4: Reporting and Monitoring

- The suppliers shall submit a report to Eskom in accordance with Data Collection Template on their compliance with the SDL&I obligations described above on a monthly basis.
- Eskom shall review the SDL&I reports submitted by the suppliers within 60 (sixty) days of receipt of the reports and notify the suppliers in writing if their SDL&I obligations have not been met.
- Upon notification by Eskom that the suppliers have not met their SDL&I obligations, the suppliers shall be required to implement corrective measures to meet those SDL&I obligations before the commencement of the following report, failing which Retention clauses shall be invoked.
- Every contract shall be accompanied by the SDL&I Implementation Schedule which must be completed by the suppliers and returned to SDL&I representative for acceptance 28 days after contract award.

Section 5: General Information on Validity of Sworn Affidavits

The following must be considered when it comes to validity of Affidavits;

Tenderers submitting B-BBEE Sworn Affidavits must ensure that the affidavits meet the following key pointers to ensure their validity:

- Name/s of deponent as they appear in the identity document and the identity number.
- Designation of the deponent as the **director, owner or member** must be indicated in order to know that person is duly authorised to depose of an affidavit. **(Mark the applicable option).**
- Name of enterprise as per enterprise registration documents issued by the CIPC, where applicable, and enterprise business address.
- Percentage of black ownership, black female ownership and designated group. In the case of specialised enterprises as per Statement 004, the percentage of black beneficiaries must be reflected. **(No blank spaces to be left).**
- Indicate total revenue for the year under review and whether it is based on **audited financial statements or management account. (Mark the applicable option).**
- Financial year end as per the **enterprise's registration documents**, which was used to determine the total revenue. (Financial year end to be stipulated by **day/month/year**).
- B-BBEE Status level. An enterprise can only have one status level. **(Tick applicable level)**
- Empowering supplier status must be indicated. For QSEs, the deponent must select the basis for the empowering supplier status.
- Date deponent signed and date of Commissioner of Oath must be the same. **(The sworn affidavit must be signed in the presence of the Commissioner of Oath. Furthermore the Commissioner must also sign and stamp)**
- Commissioner of Oath cannot be an employee or ex officio of the enterprise because, a person cannot by law, commission a sworn affidavit in which they have an interest.

8.14.2 Other constraints

The following additional constraints regarding the task orders apply:

- The *Employer* has the right to instruct the Consultant to remove any employee due to non-performance. The *Employer* must provide reasons to the Consultant for his/her instruction to remove an employee. The Consultant is required to arrange that, after one day, the employee has been removed from site.
- For early termination of the task order (prior to the due date) that is not performance related, a calendar month notice will be provided by the *Employer*.
- No notice from the *Employer* is required where the term of the task order / purchase order /budget estimate is not changed.

8.14.3 Preferred subconsultants

None.

8.14.4 Subcontract documentation, and assessment of subcontract tenders

N/A

8.14.4 Limitations on subcontracting

N/A

8.14.5 Attendance on Subconsultants

N/A

8.15 Working on the *Employer's* property

8.15.1 Employer's entry and security control, permits, and site regulations

The *Employer's* sites are classified as National Key Points and access is controlled and regulated by law. Sites such as Koeberg Nuclear Power Station have very strict entrance requirements and allowances for security clearance checks and processes of about two hours need to be made by consultants requiring access at the sites. The taking of photographs is prohibited at all sites and special permission shall be required, if necessary, for the provision of Services. Persons under the influence of intoxicating substances and alcohol are strictly not permitted to enter the *Employer's* premises. All persons entering or leaving the *Employer's* premises may be subjected to physical security checks including alcohol tests.

In addition to the above there may be other restrictions applicable on sites and Consultants shall always be required to comply. Temporary Access Permits may be arranged for a limited number of the Consultant's Key Persons who require frequent access to the *Employer's* premises for purposes of delivering the Services which may include the attendance of regular meetings.

8.15.2 People restrictions, hours of work, conduct and records

It is very important that the Consultant keeps records of his people working on the *Employer's* property, including those of his Subcontractors. The *Employer* shall have access to these records at any time. These records may be required by the *Employer* at any given time for the following:

- a) assessing compensation events
- b) Emergency (evacuation/drill) and investigations
- c) Labour unrest
- d) Absenteeism
- e) Sick leave
- f) Assessments (labour hours timesheets)

The restrictions on hours worked shall be specified on the Task Order.

8.16 Things provided by the *Employer*

The *Employer* shall provide special software and access to systems, training, and guidance on requirements specific to the *Employer* that are not common in the industry to enable the Consultant to deliver the services as required by the *Employer*.

8.17 Cataloguing requirements by the *Consultant*

N/A